

Work Order ID 73271

Monday, August 29, 2011 3:05:42 PM



Page 1

Item ID: D350-636-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube LH

Start Date: 8/29/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 9/12/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

CA

Date:

11/08/29

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D2750

F

D3492

C

100

0.00



DOCUMENT CONTROL

DC

0.00

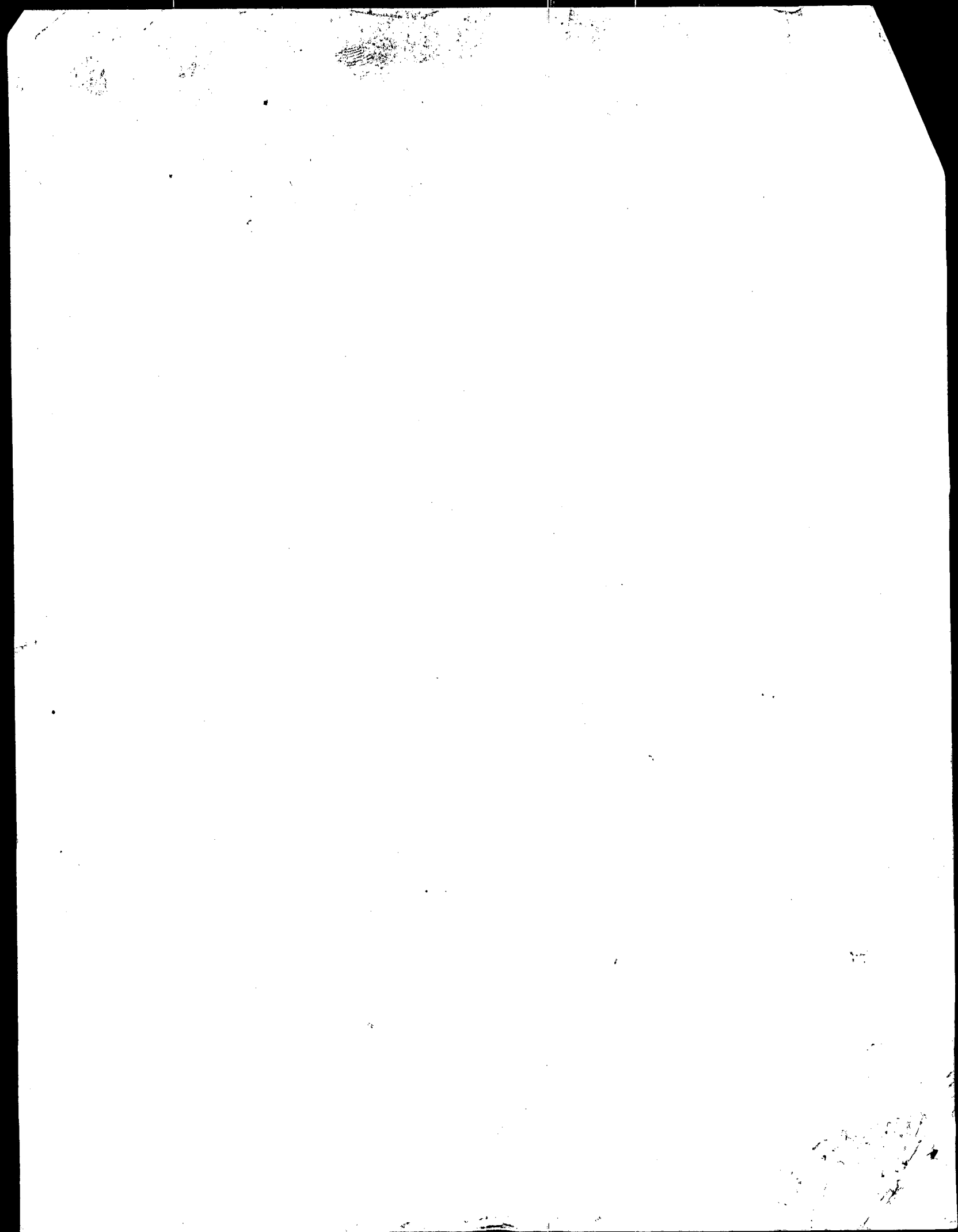
Document Control

Memo

Photocopy blue file and type labels per PPP D350-636-011 CHG 006

Su/10/07

JDF MLS 11-10-27



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Customer:

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110 	Skidtubes	0.00							
Skidtubes	Memo	0.00							
Skidtubes	1- Pick D2600-3 Bent								
	2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D2750								
	3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500", deburr.								
	4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting								
	5- Drill only two fwd step holes using DT9616. Ensure proper positioning.								
	6- Drill pilot holes as per Dwg D2750 sheet 4 (D2750-1 details). Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B)								
	7- Clecko DT8863B on second side of tube and drill pilot holes for detail B. ***SECOND SIDE***								
	8-Open up holes for Detail B to 0.375" (4 holes per side) and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750. Open up holes for ground handling and detail C to 0.500" (8 holes per side)								
	9-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297".								
	10-Open up holes of Detail A to 0.297" (total of 2 holes per side)								

mo/B

11-9-29

11/10/29

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Required Date: 9/12/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

11-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left
from bending as per QSI 004
A/R Aluminum Rod batch: ☐ M118736 BE 11/10/19

12-Grind welds flush as per Dwg D2750

BB 11/10/19

120



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

8 wk 10/20

Memo

0.00

130



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

8 wk 10/20

Memo

0.00

[illegible]

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Accept

**Setup Start**[illegible]

Stop



Start Date: 8/29/2011 **Start Qty:** 1.00

Cust Item ID:

Required Date: 9/12/2011 **Req'd Qty:** 1.00

Customer:

Reference:

Run Start



Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop

00000000000000000000000000000000

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Operation Description

Set Up/ Run Hours

Tool ID

Tool #**Plan
Code**

Accept
Qty

Reject
QtyReject
Number

**Insp.
Stamp**

140

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

Hand Finishing

150

QC3- Inspect Part Finish

0.00

Abstract

Memo

0.00

Quality Control

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Cust Item ID:

Required Date: 9/12/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 	Skidtubes	0.00							
Skidtubes	Memo 1-Open up holes of Detail C and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750. 2-Open up holes of Detail B to 0.750" (total of 4 holes per side) as per dwg D2750. 3- Open float hole to 0.500" (4 per side) 4-Chamfer holes of Detail B, C, ground handling and float holes per dwg D2750 (welding instructions on sheet 8) 5-Deburr and blow out all chips from inside of tube 6- Prepare tube for welding, remove alodine as required. 7-Bond web D2739 in place as per QSI 015 A/R <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Sikaflex-291 batch: <u>M118393</u> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> exp. date: <u>12-05-05</u> 8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 8) A/R <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Aluminum Rod batch: <u>M118736</u> 9- At section AJ-AJ drill out x-bolt spacer to 0.404" 10-Grind welds flush as per Dwg D2750	0.00							

11/10/20

3AD 11-10-20

BEN/p/12/1
 11/10/22

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Item Name: Skidtube LH

Start Date: 8/29/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 9/12/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

11-Spot face ground handling holes section (total of 4 places per side) as per
dwg D2750

12-Debur holes

170

QC10- Inspect visual per QSI004- ground welds

0.00



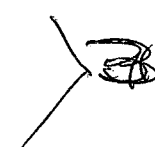
QC

Memo

0.00

Quality Control

8/11/01/05



11/10/02

180

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8/11/01/05

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Item Name: Skidtube LH

Start Date: 8/29/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 9/12/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 HandFinish	Pressure Wash per QSI005 4.3	0.00							
Hand Finishing	Memo Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.	0.00							1 BR 11-10-25.
200 Powdercoat	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
Powder Coating	Memo START TIME: 1:30 OVEN TEMPERATURE: 320°F FINISH TIME: 2:00	0.00							1 X M 11/10/25
210 QC	QC3- Inspect Part Finish	0.00							
Quality Control	Memo Inspect for foreign object per QSI 024	0.00							1 BR 11-10-26.

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Item Name: Skidtube LH

Start Date: 8/29/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 9/12/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

220



HandFinish

HandFinishing

0.00

Memo

0.00

Hand Finishing

1- Install inserts as per Dwg D2750

1 BR 11-10-26

230



HandFinish

HandFinishing

0.00

Memo

0.00

Hand Finishing

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3" batch: N/A

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750

SIKA FLEX 241

BATCH: 118293EXP DATE: 12-8

4-assemble o-ring to plug as per dwg D3492 and apply o-ring lube

A/R 55-o-ring lube batch: 1103485-Coat all exposed fasteners with "LPS Procyon" batch: 1145961 BR 11-10-27

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Smiler
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Item Name: Skidtube LH

Start Date: 8/29/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 9/12/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

240 QC5- Inspect part completeness to step on W/O

0.00



QC Memo

0.00

Quality Control

8 u 10/27

250 Pick Kit

0.00



Packaging Memo

0.00

Packaging

SP 11-10-27

260 QC4- 100% Inspect kits for completeness

0.00



QC Memo

0.00

Quality Control

*****ensure antiseize is on AN8C21A bolts*****

8 u 10/27

(Signature)

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Item Name: Skidtube LH

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Cust Item ID:

Required Date: 9/12/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270		0.00							
	Packaging								
Packaging	Memo	0.00							
Packaging	Package as per PPP D350-636-011 <i>NEW</i>								
280		0.00							
	QC21- Final Inspection - Work Order Release								
QC	Memo	0.00							
Quality Control									

*Ca 11/11/28**11/10/31*
CMF 11-10-28

Picklist Print

Monday, August 29, 2011 3:05:39 PM

Page 1

Work Order ID: 73271

Parent Item: D350-636-011

Parent Item Name: Skidtube LH



Start Date: 8/29/2011

Required Date: 9/12/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:I 02.09.25 Rearranged procedure steps KJ
 IPP Rev:J 06-03-23 As per Rev D JLM
 IPP Rev:K 06-07.13 As per dsi9343 EC
 IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verf:EC
 IPP Rev:M 08-04-22 update steps 4, 13 DD verified by:ec
 IPP Rev:N 08-09-23 revF as per dwg DD verified by:ec
 IPP Rev:O 09-02-06 apply antiseize on AN8C21A bolts as per PAR09-010
 DD verf:EC IPP Rev:P 10.06.22 revise
 seq110 DD verf:EC IPP Rev:Q 10.10.01 as per IIN revH
 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3492-1 Plug		Manufactured	No			230	Each	72.0000	8	8			
<div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div>													
<div> <div>FP 73402</div> <div>69531</div> <div>71836</div> </div>													
<div> <div>72</div> <div>8</div> <div>64</div> </div>													
D3492-3 Plug		Manufactured	No			230	Each	161.0000	8	8			
<div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div>													
<div> <div>FP</div> <div>70692</div> <div>71838 ✓</div> <div>72126</div> </div>													
<div> <div>161</div> <div>4</div> <div>100</div> <div>57</div> </div>													

BR 11-10-27

8.

BR 11-10-27

8.

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\FORMS\Quality Assurance\approved QANCRWO RevE

Picklist Print

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Work Order ID: 73271

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 8/29/2011

Required Date: 9/12/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1611-010

Purchased

No

230

Each

238.0000

8

8



O-RING



BR 11-10-27.

Location

Loc Qty

Loc Code

FP

221

117460

8

118077

13

118612 ✓

200

FP-A

17

110915

14

115589

3

8.

NAS1149D0863J

Purchased

No

250

Each

170.0000

2

2



WASHER



Sp 11-10-27.

Location

Loc Qty

Loc Code

ST298

170

118078

170

OK

D2744

Manufactured

No

110

Each

85.0000

1

1



Cap



BEU/c/17

Location

Loc Qty

Loc Code

LG002

29

62715

1

70881

28

WA

56

71861

56

1

Dart Aerospace Ltd

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID: 73271



Parent Item: D350-636-011



Parent Item Name: Skidtube LH

Start Date: 8/29/2011

Required Date: 9/12/2011

Start Qty: 1.00

Required Qty: 1.00

D2600-3-BENT

Manufactured No

110

Each

11.0000

1

1



Extrusion Bent

Location

Loc Qty

Loc Code

LG

73253

11

66875

8

72153

3

D2743

Manufactured No

160

Each

264.0000

8

8



Crossbolt Spacer

Location

Loc Qty

Loc Code

LG

206

69818

41

71839

165

LG001

58

67766

4

68251

54

D2739

Manufactured No

160

Each

12.0000

1

1



350 I Beam

Location

Loc Qty

Loc Code

LG

12

70823

12

72156

①

D3490-3

Manufactured No

160

Each

46.0000

4

4



Cross Bolt Spacer

Location

Loc Qty

Loc Code

LG

46

70768

46

mo/B 11/29/29

BE 11/10/21

SAD 11-10-12

*BE 11/10/21
B 73295 4*

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 8/29/2011

Required Date: 9/12/2011

Start Qty: 1.00

Required Qty: 1.00

D3490-1 Manufactured No

160 Each 130.0000 4 4



Cross Bolt Spacer



BE 11/02/1

Location	Loc Qty	Loc Code
LG	128	
67773	5	
69823	58	
71841	65	
LG001	2	
62450	2	

4

ALS4-1032-225 Purchased No

220 Each 1,931.000 38 38



Insert



BR 11-10-27

Location	Loc Qty	Loc Code
ST282	1931	
110768	62	
117717	9	
118386	860	
118696	1000	

38

D3793-3 Manufactured No

230 Each 22.0000 1 1



Wearshoe



BR 11-10-27

Location	Loc Qty	Loc Code
FP018	22	
70813	10	
72160	12	

1

74593

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Work Order ID: 73271

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 8/29/2011

Required Date: 9/12/2011

Start Qty: 1.00

Required Qty: 1.00

AN8C35A

Purchased

No

230

Each

132.0000

1

1



BOLT



BR 11-10-27.

Location

Loc Qty

Loc Code

FP

96

117511 ✓

30

118286

66

FP-A

1

115960

1

ST345

34

117834

34

ST346

1

114442

0

115188

0

115960

1

D3793-1

Manufactured

No

230

Each

16.0000

1

1



Wearshoe



BR 11-10-27.

Location

Loc Qty

Loc Code

FP018

16

70781

16

D3488-041

Manufactured

No

230

Each

14.0000

1

1



Blade Fitting Assembly, LH



BR 11-10-27.

Location

Loc Qty

Loc Code

FG008

11

69903 ✓

11

FP007

1

61689

1

FP008

2

67788

2

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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Dart Aerospace Ltd

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Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 8/29/2011

Required Date: 9/12/2011

Start Qty: 1.00

Required Qty: 1.00

D3536-25	Manufactured	No	230	Each	18.0000	1	1	
Gasket								

Location	Loc Qty	Loc Code
FP012 74526	18	1
70780	18	

D3631-1	Manufactured	No	230	Each	251.0000	8	8	
Washer								

Location	Loc Qty	Loc Code
ST072	251	
68062 ✓	251	8

D3791-1	Manufactured	No	230	Each	10.0000	1	1	
Wearplate								

Location	Loc Qty	Loc Code
FP017 74527	10	1
62239	2	
69282	8	

AN960C10L	NAS1149C0332 ✓	Purchased	No	230	Each	0.0000	38	38
washer								

Location	Loc Qty	Loc Code
118354		38

D2745	Manufactured	No	230	Each	309.0000	8	8	
Bushing								

Location	Loc Qty	Loc Code
FP-A	147	
69529	147	
ST023	162	
71835 ✓	162	8

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Monday, August 29, 2011 3:05:40 PM

Work Order ID: 73271

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 8/29/2011

Required Date: 9/12/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C5A Purchased No 230 Each 1,261.000 34 34



Bolt



BR 11-10-27

Location	Loc Qty	Loc Code
FP-A	7	
115835	7	
ST350	1254	
116419	28	
116549	30	
117343 ✓	462	34.
117764	222	
117872	12	
118451	500	

D3537-1 Manufactured No 230 Each 57.0000 3 3



Wearpad



BR 11-10-27

Location	Loc Qty	Loc Code
FP016 74597	50	3
68944	0	
70687	50	
FP017	7	
69817	5	
70686	2	

NAS1149C0832R Purchased No 230 Each 363.0000 1 1



WASHER



BR 11-10-27

Location	Loc Qty	Loc Code
FP-B	33	
114915 ✓	33	1
ST297	330	
114915	330	

Picklist Print

Monday, August 29, 2011 3:05:40 PM

Work Order ID: 73271

Parent Item: D350-636-011


Parent Item Name: Skidtube LH

Start Date: 8/29/2011

Required Date: 9/12/2011

Start Qty: 1.00


Required Qty: 1.00

AN3C6A Purchased No 230 Each 328.0000 4 4

 BOLT

BR 11-10-27.

Location	Loc Qty	Loc Code
FP-A	1	
111982	1	
ST351	327	
111982	2	
116419	23	
116549	2	
116704	12	
117619	22	
117688	16	
117872	50	
118422 ✓	200	


4.

NAS1611-013 Purchased No 230 Each 216.0000 8 8

 O-RING

BR 11-10-27

Location	Loc Qty	Loc Code
FP	55	
117291	2	
117887	53	
FP-A	161	
116582	5	
118384 ✓	156	

8.

D3535-25 Manufactured No 230 Each 16.0000 1 1

 Wearshoe

BR 11-10-27.

Location	Loc Qty	Loc Code
FP018 <i>73424.</i>	16	
62233	1	
69743	15	

Picklist Print

Monday, August 29, 2011 3:05:40 PM

Work Order ID: 73271

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 8/29/2011

Required Date: 9/12/2011

Start Qty: 1.00

Required Qty: 1.00

D3794-1 Manufactured No

230 Each

20.0000 1 1



Gasket



BR 11-10-27.

Location

Loc Qty

Loc Code

FP010

74529
70779

20

20

1

MS21043-6 Purchased No

230 Each

577.0000 4 4



NUT



BR 11-10-27.

Location

Loc Qty

Loc Code

FG

20

103693

20

ST301

557

112314 ✓

347

117887

10

118384

200

H.

D3493-1 Manufactured No

250 Each

89.0000 2 2



Washer



Sp 11-10-27.

Location

Loc Qty

Loc Code

ST062

89

70697

49

71846

40

1X

Picklist Print

Monday, August 29, 2011 3:05:40 PM

Work Order ID: 73271

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 8/29/2011

Required Date: 9/12/2011

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased

No

250

Each

124.0000

2

2



NUT



SP

Location

Loc Qty

Loc Code

FP-B

1

115884

1

ST293

38

118077

38

ST303

85

115884

0

117423

5

118354

30

118614

50

2x

AN8C21A

Purchased

No

250

Each

61.0000

2

2



BOLT



SP 11-10-27

1x 118758

Location

Loc Qty

Loc Code

ST344

11

117764

11

ST345

50

118045

50

1x

NAS1515H3L

Purchased

No

230

Each

228.0000

4

4



WASHER



BR 11-10-27

Location

Loc Qty

Loc Code

FG

40

102472

40

ST277

188

113362

88

118686

100

4.

Picklist Print

Monday, August 29, 2011 3:05:40 PM

Work Order ID: 73271



Parent Item: D350-636-011



Parent Item Name: Skidtube LH

Start Date: 8/29/2011

Required Date: 9/12/2011

Start Qty: 1.00

Required Qty: 1.00

D2741

Manufactured No

250

Each

-11.0000

1

1



Blade, 350 Skidtube



SP
B 70668

Location

Loc Qty

Loc Code

ST466

11

69133

11

D3532-1

Manufactured No

250

Each

17.0000

2

2



Spacer



SP 11-10-27

Location

Loc Qty

Loc Code

ST065

17

69895

17

2x

8

7

6

5

4

3

2

1






QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1	1			D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-5	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

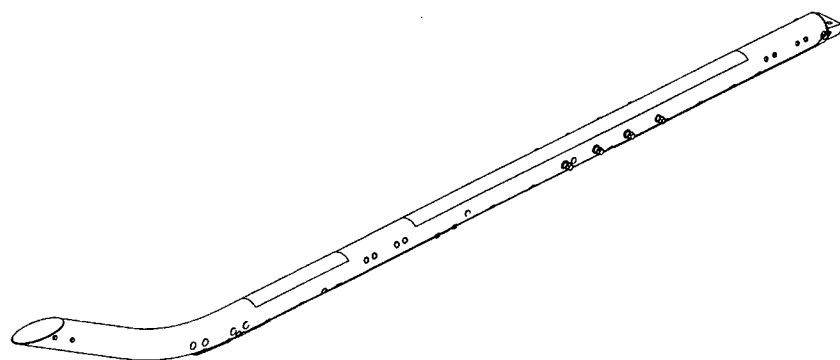
GENERAL NOTES:

- 1) MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH:
ACID ETCH, ALONDE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- 8) WELD PER DART QSI 004
- 9) INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES (Ø0.297) FOR WEARSHOE INSERTS
- 10) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 11) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
POWDER COATING WITH MEK DEGREASER.
- 12) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- 13) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

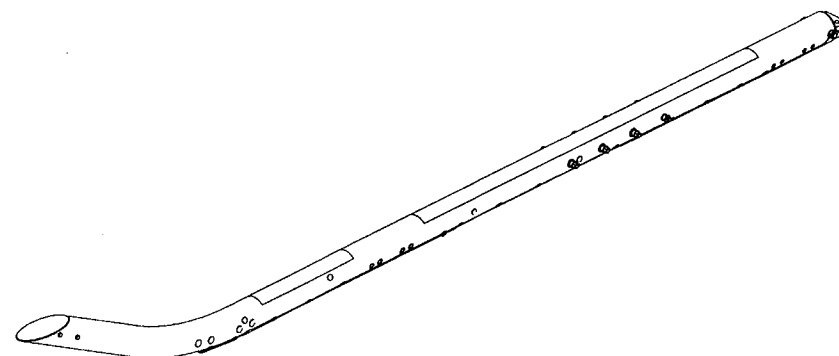
CL11108129
W/O: 73 271

RELEASED
68-07-22-147

F	INCORPORATE DSI 9413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/-3 REPLACES D3535-13/-35 (ZN C8-1); D3794-1/-3 REPLACES D3536-13/-35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWD/AFT SADDLE REMOVED (8 PL). WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A6-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS, CHANGE INSERTS; ADD D3631-1; REMOVE QTY (38) NAS1515H3L, REMOVE QTY (10) NAS1515H8L, REMOVE D2741, QTY (2) AN960C816; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEC 9133/9157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.07.16		
DART AEROSPACE USA, INC. PORT HADLOCK, WA			
DRAWING NO. D2750		REV. F SHEET 1 OF 1	
TITLE 350 SKIDTUBE ASSEMBLY		SCALE NTS	
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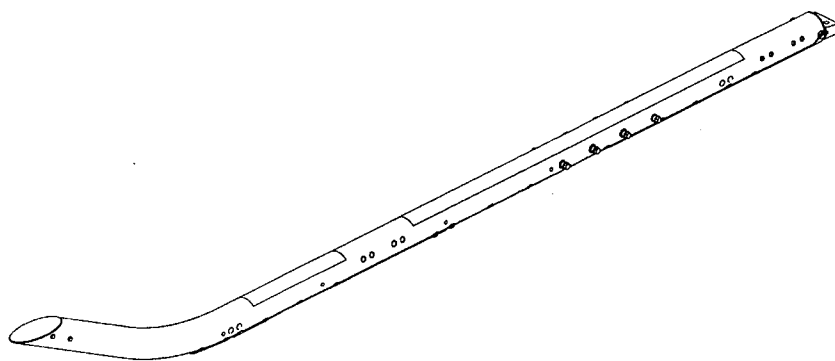
D2750-041 350 SKIDTUBE ASSEMBLY, LH



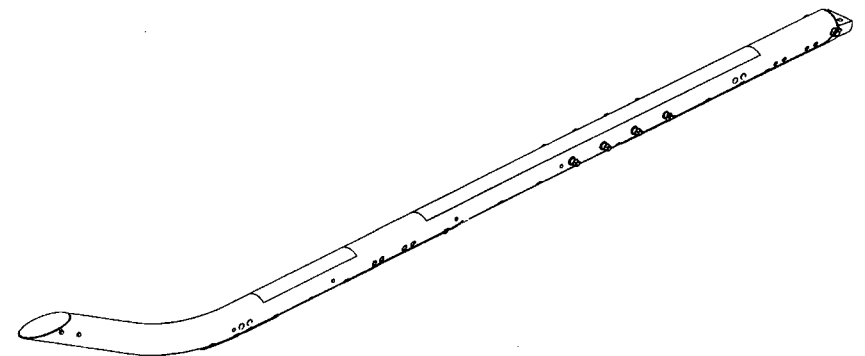
D2750-042 350 SKIDTUBE ASSEMBLY, RH

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08-07-16

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MFG. APPR.	MP	D2750	SHEET 2 OF 11
APPROVED	MP	TITLE	SCALE
DE APPR.	MP	350 SKIDTUBE ASSEMBLY	NTS
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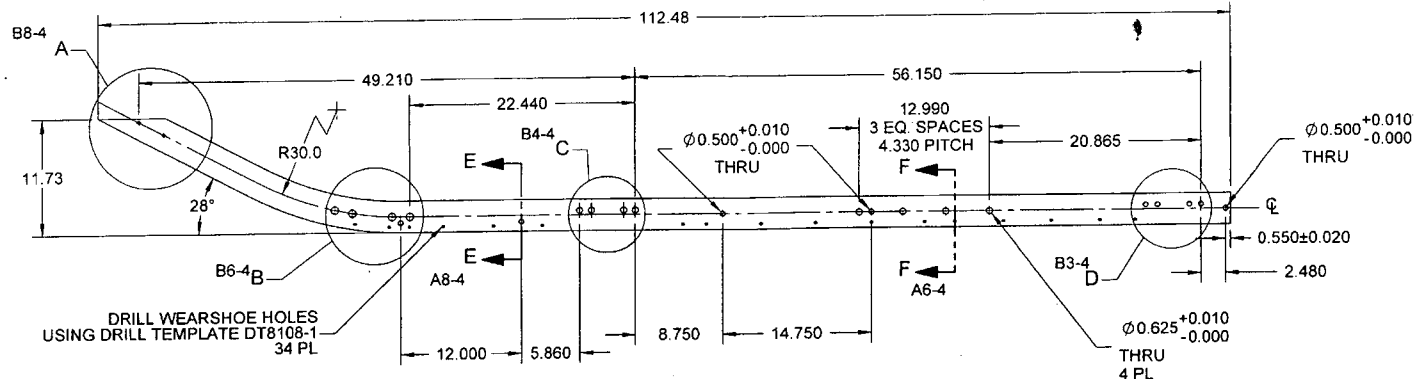
D2750-043 350 SKIDTUBE ASSEMBLY, LH



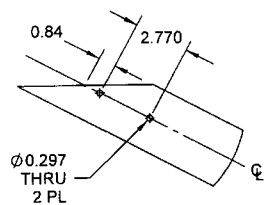
D2750-044 350 SKIDTUBE ASSEMBLY, RH

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68-09-22/100

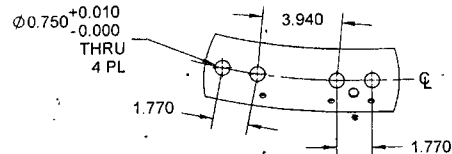
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DRAWN	PD	PORT HADLOCK, WA	
CHECKED	NA	DRAWING NO.	REV. F
MFG. APPR.	NA	D2750	SHEET 3 OF 11
APPROVED	NA	TITLE	SCALE
DE APPR.	NA	350 SKIDTUBE ASSEMBLY	NTS
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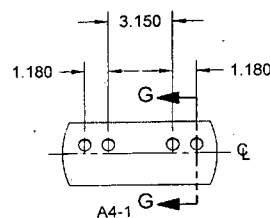
D2750-1 LH SKIDTUBE



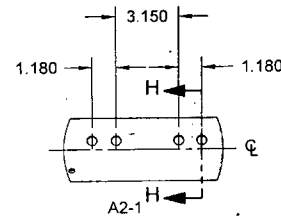
DETAIL A
SCALE 2X



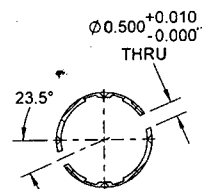
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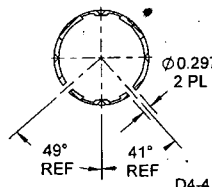
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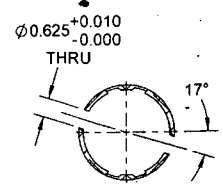
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SCALE 2X



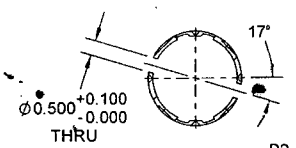
SECTION E-E
SCALE 3X, 2 PL



SECTION F-F
SCALE 3X, 17 PL



SECTION G-G
SCALE 3X, 4 PL

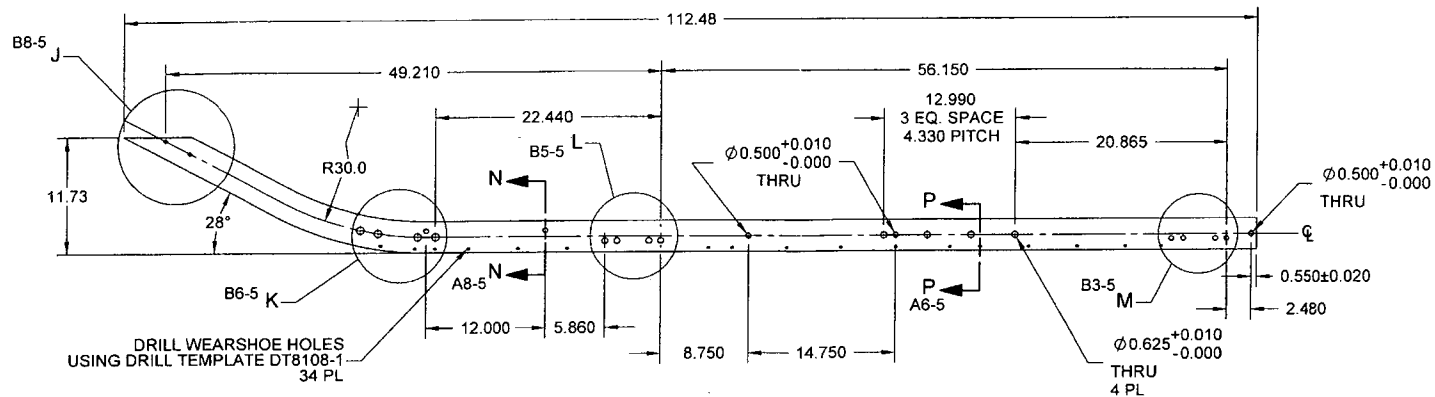


SECTION H-H
SCALE 3X, 4 PL

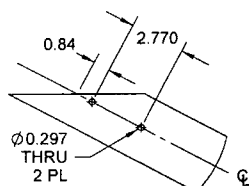
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CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 4 OF 11
APPROVED		TITLE	SCALE
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DATE		08.07.16	

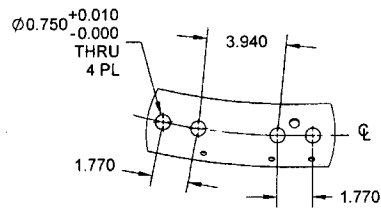
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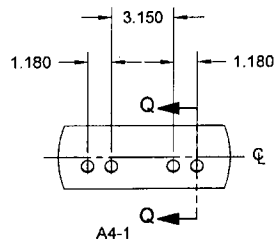
D2750-2 RH SKIDTUBE



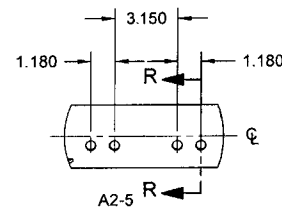
DETAIL J
SCALE 2X



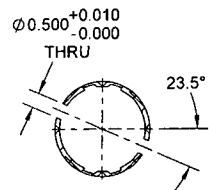
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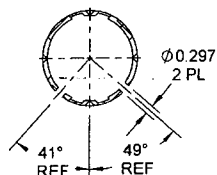
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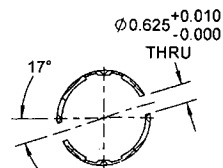
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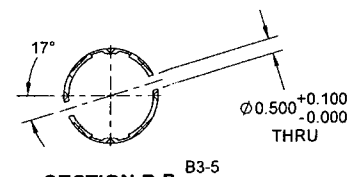
SECTION N-N
SCALE 3X, 2 PL



SECTION P-P
SCALE 3X, 17 PL



SECTION Q-Q
SCALE 3X, 4 PL



SECTION R-R
SCALE 3X, 4 PL

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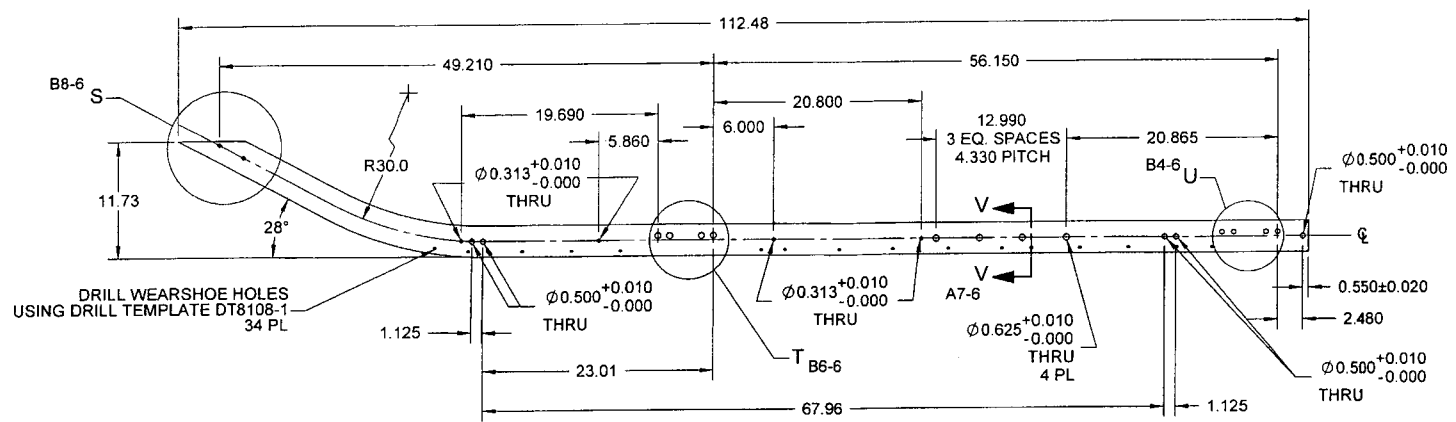
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APPROVED	
DE APPR.	
DATE	08.07.16

DART AEROSPACE USA, INC.
PORT HADLOCK, WA

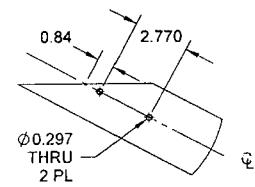
DRAWING NO. **D2750** REV. F
TITLE **350 SKIDTUBE ASSEMBLY** SCALE NTS
SHEET 5 OF 11

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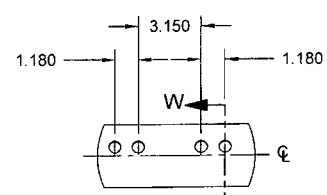
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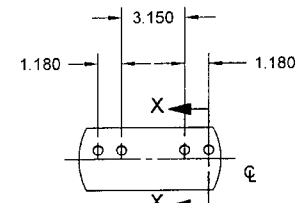
D2750-3 LH SKIDTUBE



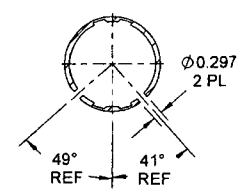
DETAIL S
SCALE 2X



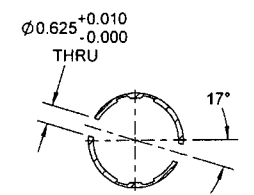
DETAIL T
SCALE 2X



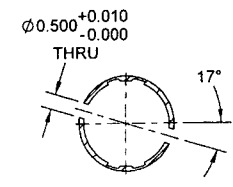
DETAIL U
SCALE 2X



SECTION V-V
SCALE 3X, 17 PL



SECTION W-W
SCALE 3X, 4 PL

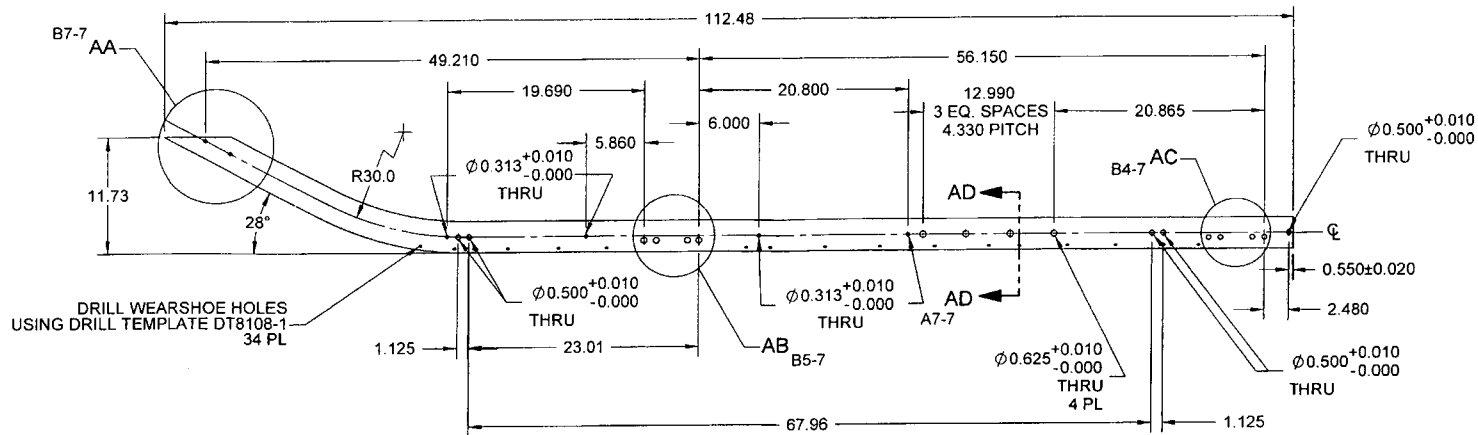


SECTION X-X
SCALE 3X, 4 PL

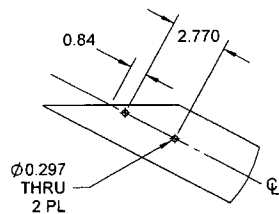
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DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 6 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	<small>COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

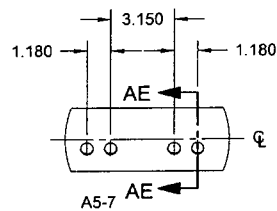
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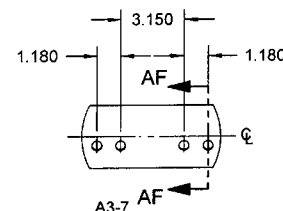
D2750-4 RH SKIDTUBE



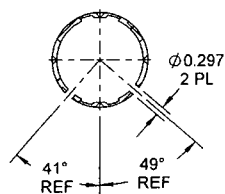
DETAIL AA
SCALE 2X



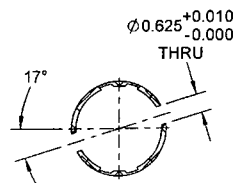
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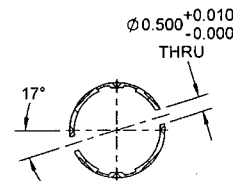
DETAIL AC
SCALE 2X



SECTION AD-AD
SCALE 3X, 17 PL



SECTION AE-AE
SCALE 3X, 4 PL

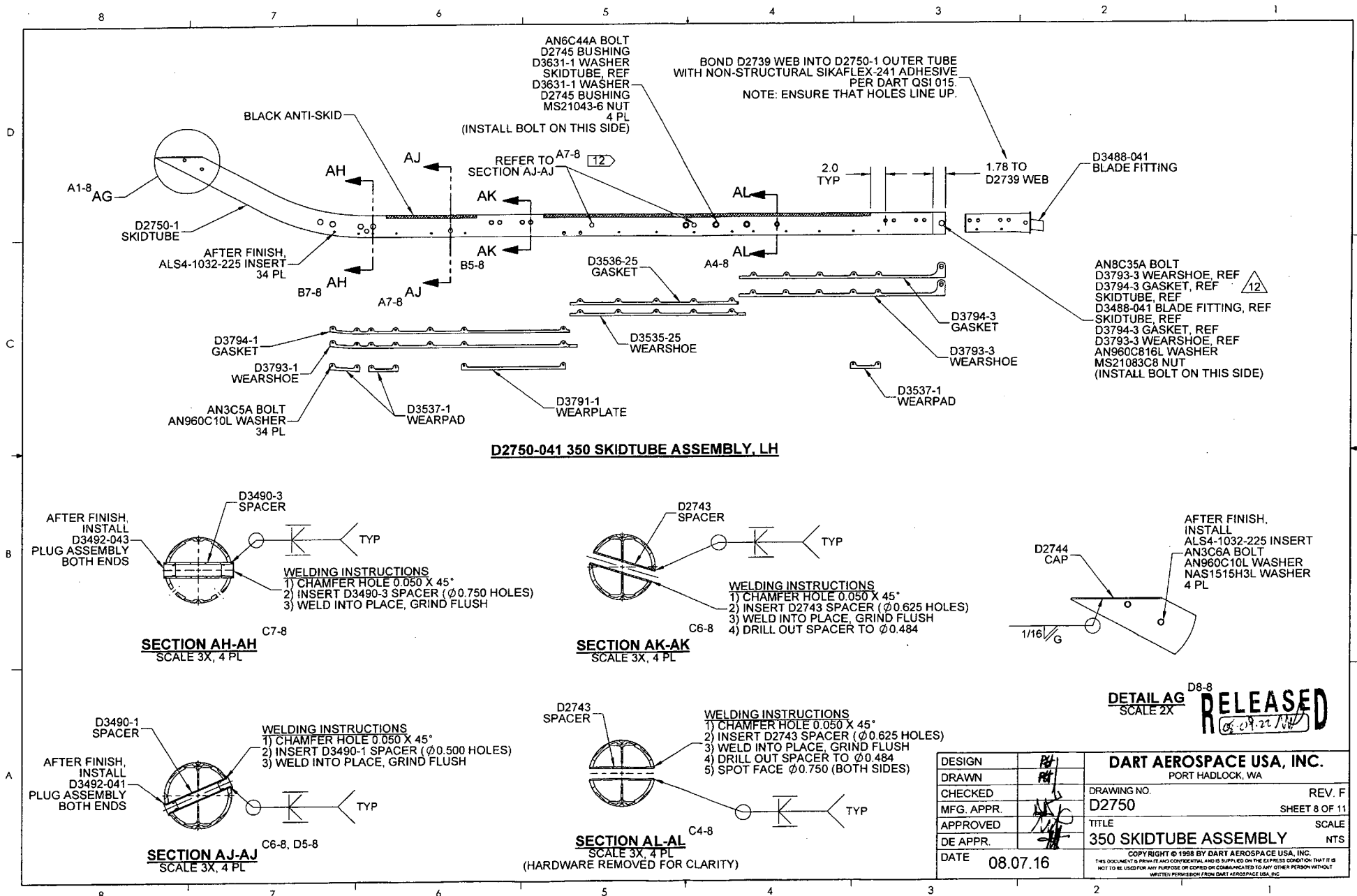


SECTION AF-AF
SCALE 3X, 4 PL

RELEASED
08-09-22-710

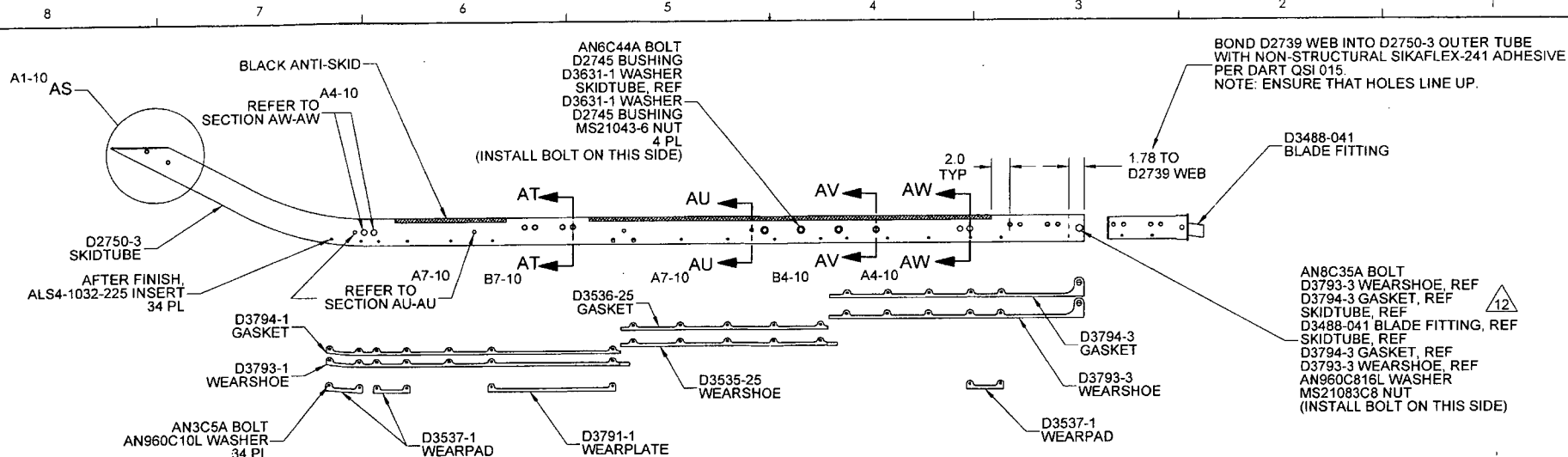
DESIGN		DART AEROSPACE USA, INC.	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO. D2750	REV. F
MFG. APPR.		SHEET 7 OF 11	
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	
DATE	08.07.16	NTS	

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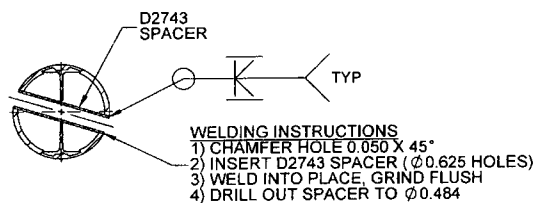


DESIGN	PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWN	PH		
CHECKED	AK	DRAWING NO.	REV. F
MFG. APPR.	AK	D2750	SHEET 8 OF 11
APPROVED	AK	TITLE	SCALE
DE APPR.	AK	350 SKIDTUBE ASSEMBLY	NTS
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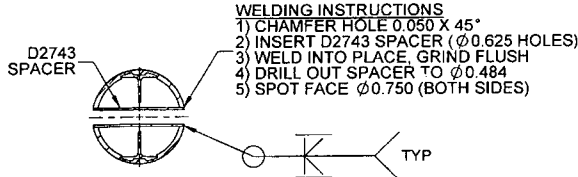
RELEASED
08.07.16



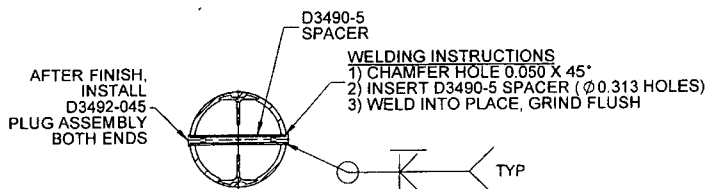
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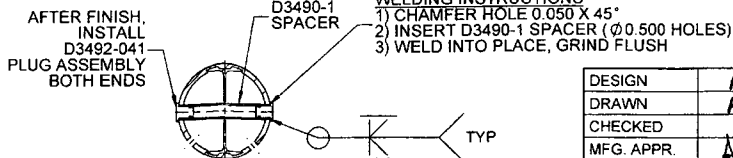
SECTION AT-AT SCALE 3X, 4 PL



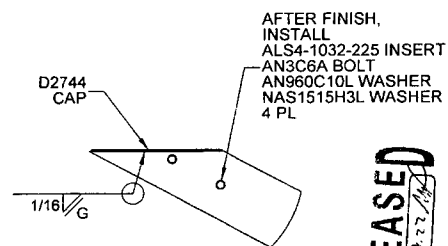
SECTION AV-AV SCALE 3X, 4 PL (HARDWARE REMOVED FOR CLARITY)



SECTION AU-AU SCALE 3X, 4 PL



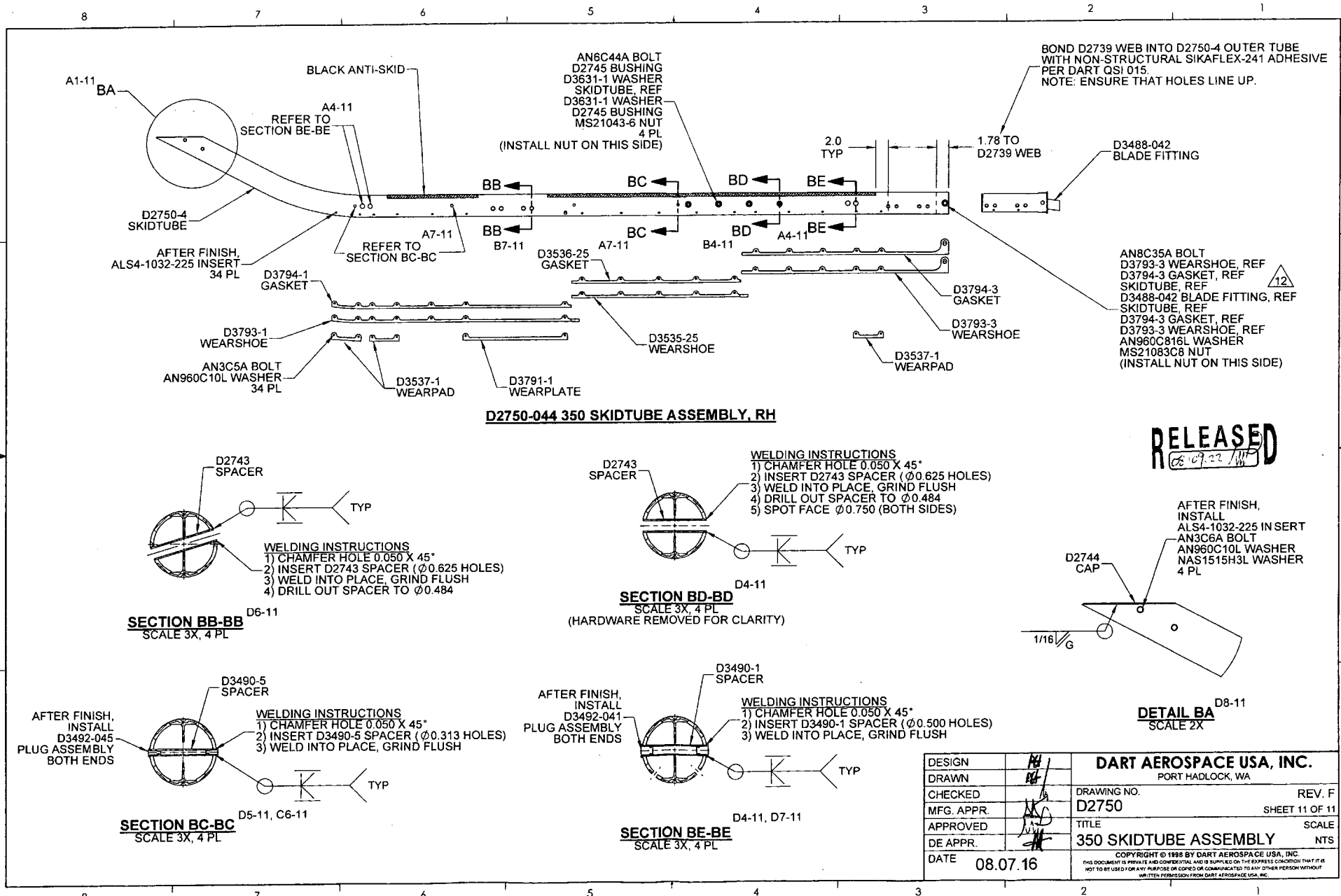
SECTION AW-AW SCALE 3X, 4 PL

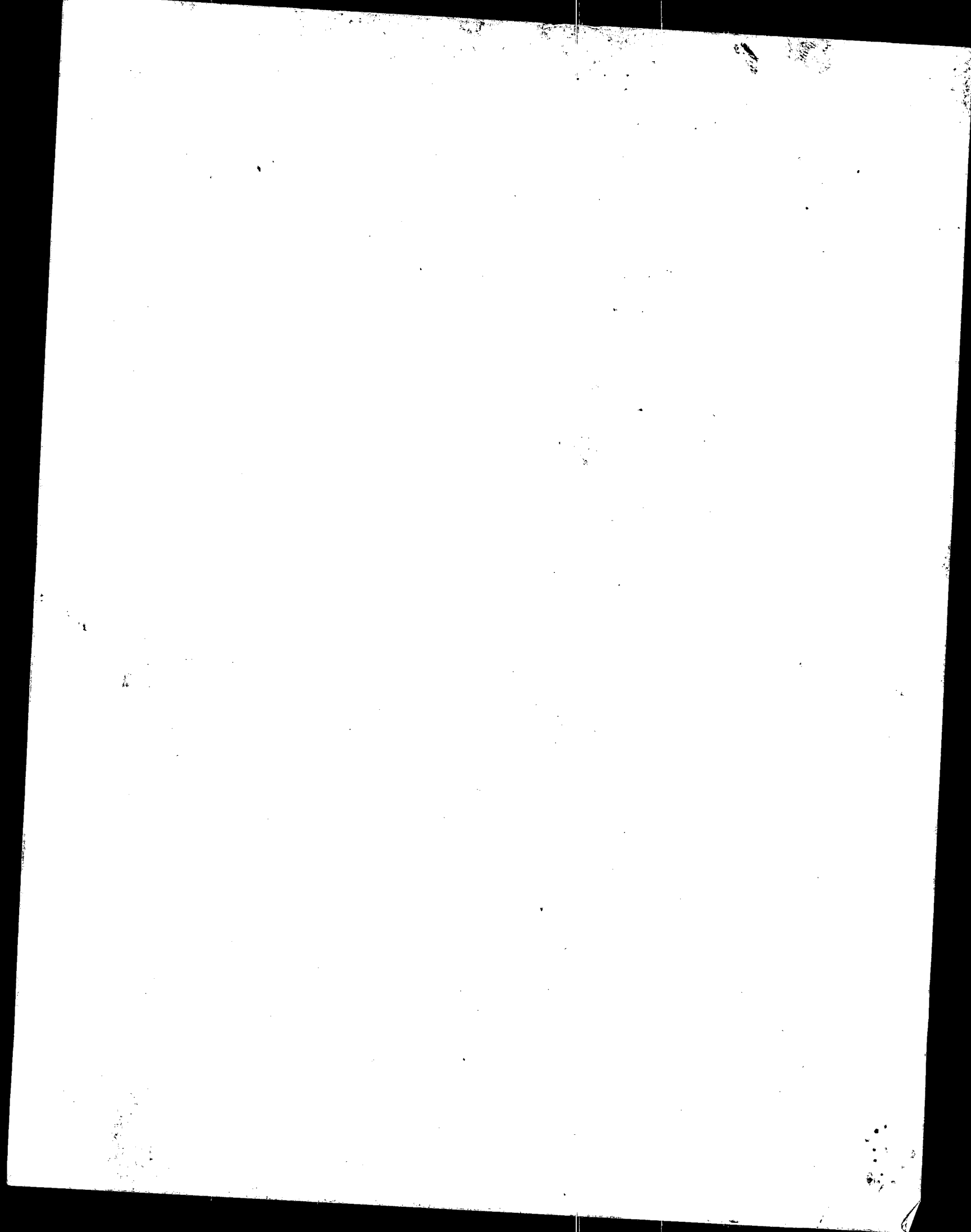


DETAIL AS SCALE 2X

DESIGN	AS	DART AEROSPACE USA, INC.	
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CHECKED	AS	DRAWING NO.	REV. F
MFG. APPR.	AS	D2750	SHEET 10 OF 11
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DE APPR.	AS	350 SKIDTUBE ASSEMBLY	NTS
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RELEASED
08-07-16





NO. 270

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: B 72821
Part number: D 350 636 D12
Description: 350 skid tube
Welding Process: Tig[☒] Mig[]
Base material: Alum
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pat Dunn Date of Test Coupon 11-10-07
Welder Barclay Elliott Date of Test Coupon 11-10-07

The above named individual is qualified in accordance with AWS D17.1.2001 to weld